

WHAT IS CLAIMED IS:

1. An electronic device comprising:
  - a substrate;
  - a lower electrode layer on the support and comprising a material capable of reactive-ion etching with a fluorine-based gas; and
    - an upper electrode layer on the lower electrode layer and comprising a material capable of reactive-ion etching with a chlorine-based gas.
- 5 2. An electronic device according to Claim 1, wherein the lower electrode comprises at least one element selected from the group consisting of Si, Mo, W, B, C, S and Ta.
3. An electronic device according to Claim 2, wherein the lower electrode has a thickness of about 0.5 nm to 1000 nm.
4. An electronic device according to Claim 3, wherein the support comprises a piezoelectric material.
5. An electronic device according to Claim 4, wherein the lower electrode has a thickness of about 5-500 nm.
6. An electronic device according to Claim 5, wherein the substrate is selected from the group consisting of a single crystal substrate, single crystal film, triaxial orientation film and uniaxial orientation film.  
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7. An electronic device according to Claim 1, wherein the lower electrode has a thickness of about 0.5 nm to 1000 nm.

8. An electronic device according to Claim 1, wherein the support comprises a piezoelectric material.

9. An electronic device according to Claim 1, wherein the substrate is selected from the group consisting of a single crystal substrate, single crystal film, triaxial orientation film and uniaxial orientation film.

10. A method for manufacturing an electronic device, comprising the steps of:

providing a substrate having a base film on a surface thereon, said base film comprising a material capable of reactive-ion etching with a fluorine-based gas;

forming a cover film comprising a material capable of reactive-ion etching with a chlorine-based gas on the base film;

10 forming a mask having a predetermined pattern on the cover film;

etching the cover film by chlorine-based gas reactive ion etching; and

15 etching the base film exposed by etching of the cover film by fluorine-based gas reactive ion etching.

11. A method according to Claim 10, wherein the base film contains at least one element selected from the group consisting of Si, Mo, W, B, C, S and Ta.

12. A method according to Claim 11, wherein the base film has a thickness of about 0.5 nm to 1000 nm.

13. A method according to Claim 12, wherein the base film has a thickness of about 1-500 nm.

14. A method according to Claim 13, wherein the substrate comprises a piezoelectric material.

15. A method according to Claim 13, wherein the substrate is selected from the group consisting of a single crystal substrate, single crystal film, triaxial orientation film and uniaxial orientation film.

16. A method according to Claim 10, wherein the base film has a thickness of about 0.5 nm to 1000 nm.

17. A method according to Claim 10, wherein the base film has a thickness of about 1-500 nm. /

18. A method according to Claim 10, wherein the substrate comprises a piezoelectric material.

19. A method according to Claim 10, wherein the substrate is selected from the group consisting of a single crystal substrate, single crystal film, triaxial orientation film and uniaxial orientation film.